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Coplanar Waveguide Feeds for Phased Array Antennas

(NASA-TM-104467) COPLANAR WAVEGUIDE FEEDS
FOR PHASED ARRAY ANTENNAS (NASA) 9 0
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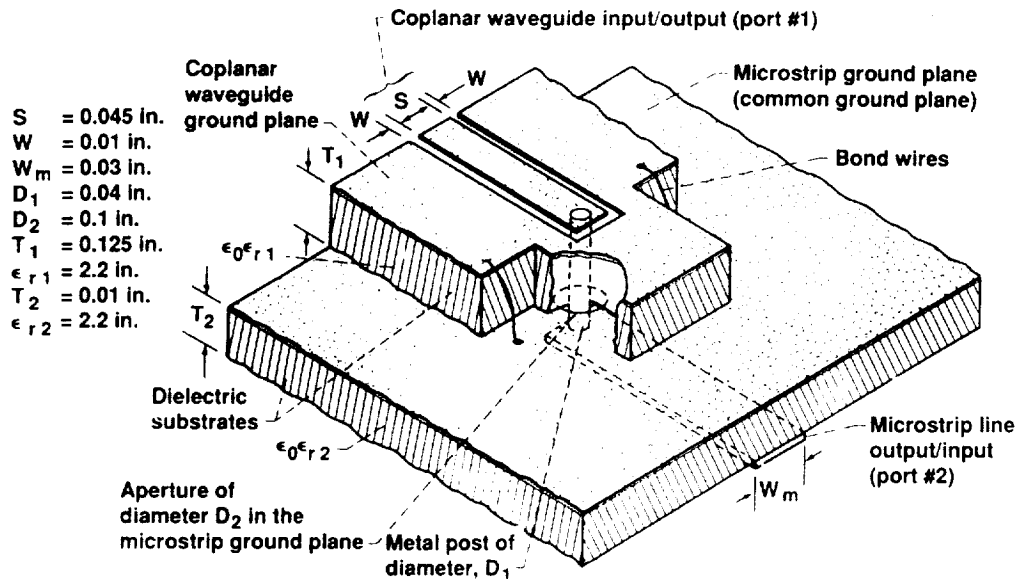


Figure 3.—Schematic of a CPW/microstrip line post coupler feed.

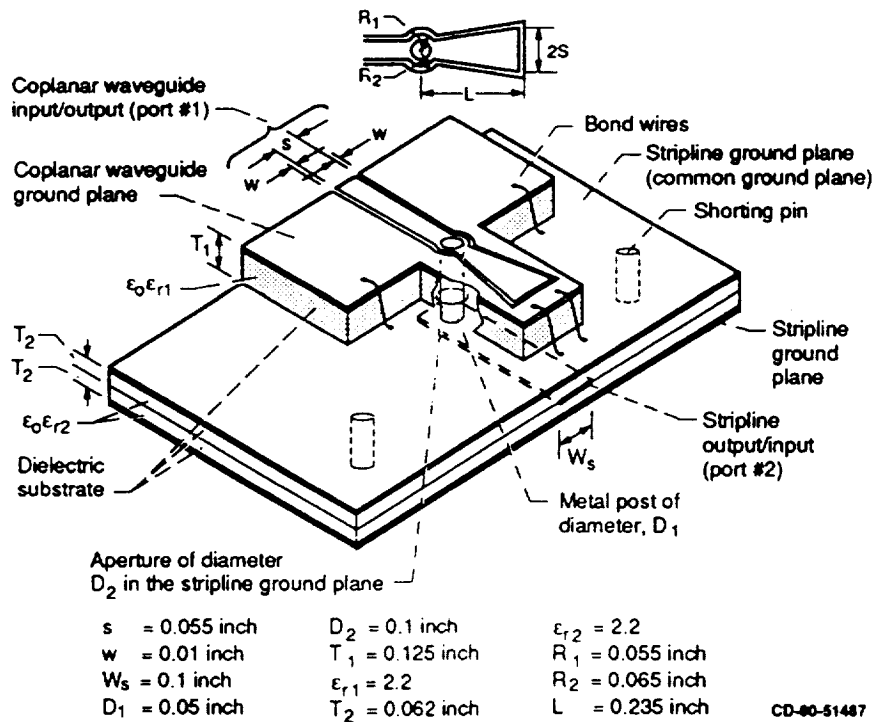


Figure 4.—Schematic of a CPW/balanced stripline post coupler.

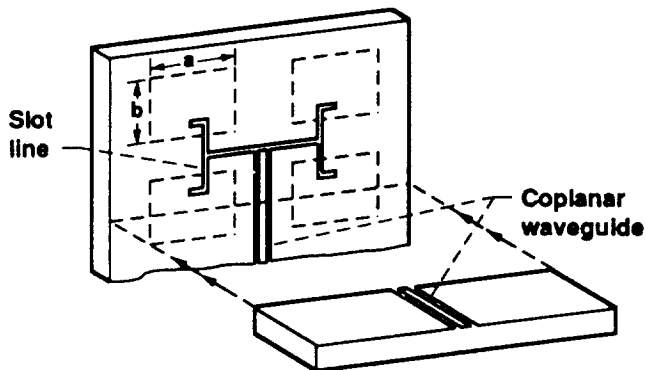


Figure 5.—Schematic of a CPW/slot line feed.

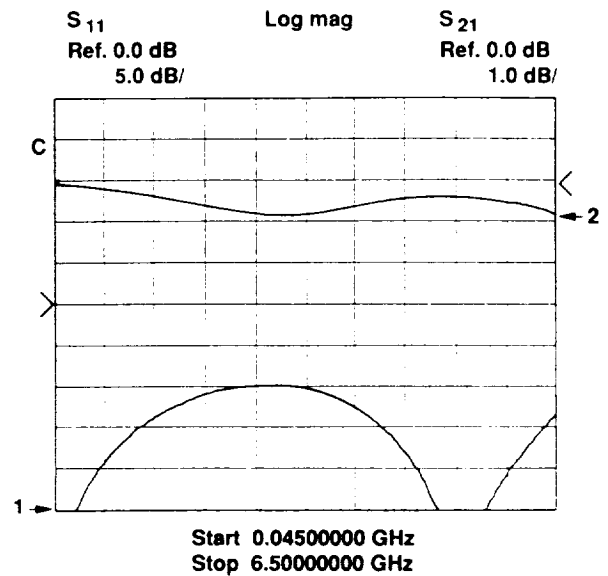


Figure 7.—Measured return loss (S_{11}) and insertion loss (S_{21}) of a CPW/microstrip line post coupler feed.

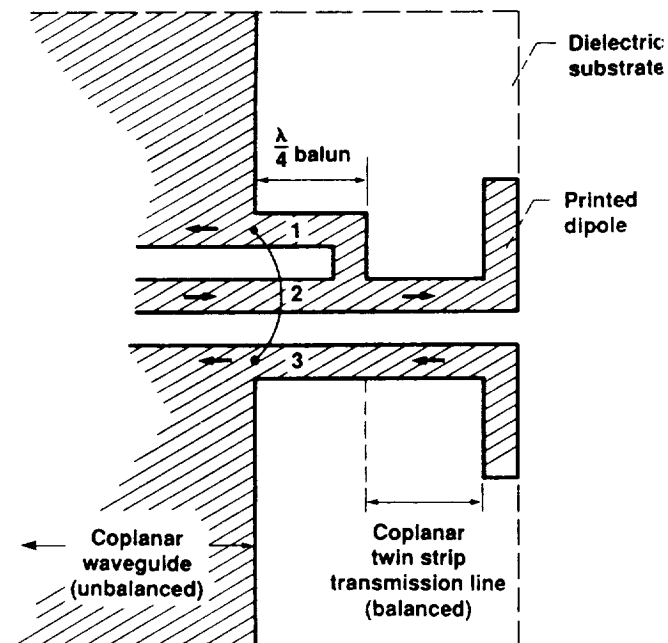


Figure 6.—Schematic of a CPW/balanced coplanar stripline feed.

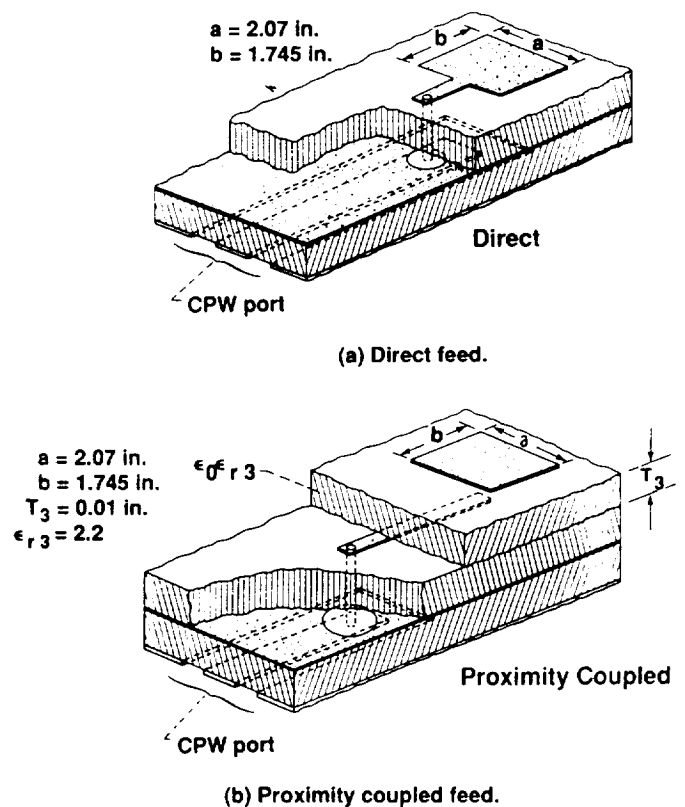


Figure 8.—Schematic illustrating the integration of a patch antenna with CPW/microstrip feed.

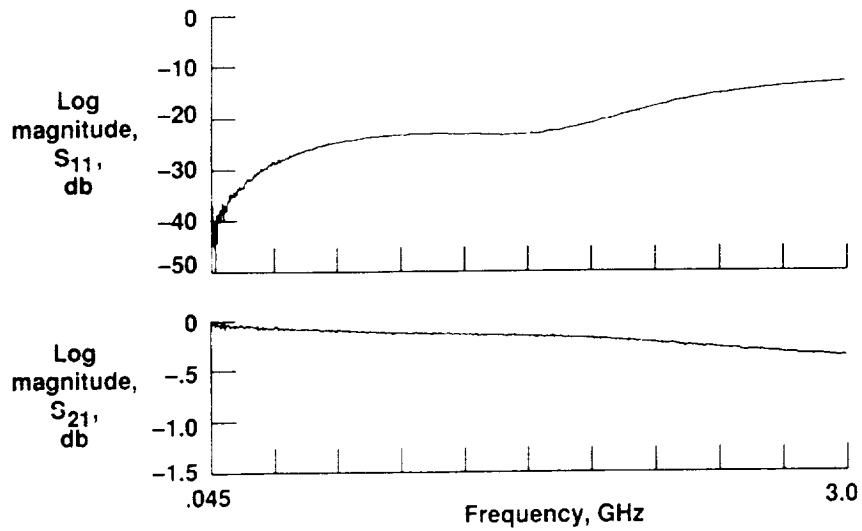
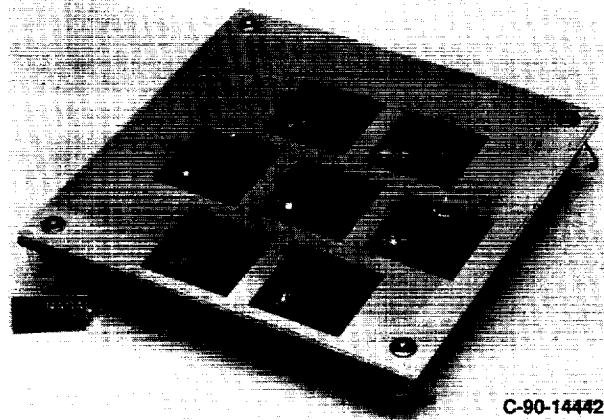
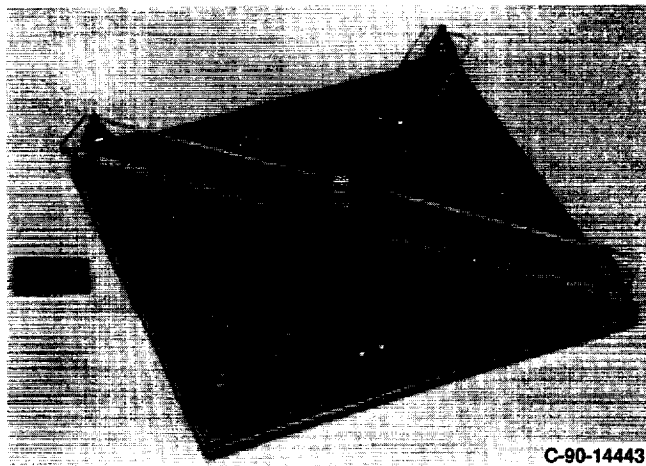


Figure 9.—Measured return loss (S_{11}) and insertion loss (S_{21}) of a CPW/balanced stripline coupler feed.

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(a) Antenna layer.



(b) CPW power divider layer.

Figure 10.—Proof-of-concept model of a seven patch hexagonal CP subarray.